

PATENT COOPERATION TREATY

JAF JAS
PCT

From the INTERNATIONAL SEARCHING AUTHORITY

To:
BLAKELEY, SOKOLOFF, TAYLOR & ZAFMAN
LLP
Attn. DE CLERK, Stephen, M.
12400 Wilshire Blvd., 7th floor
Los Angeles, California 90025-1026
UNITED STATES OF AMERICA

NOTIFICATION OF TRANSMITTAL OF
THE INTERNATIONAL SEARCH REPORT AND
THE WRITTEN OPINION OF THE INTERNATIONAL
SEARCHING AUTHORITY, OR THE DECLARATION

ENTERED

MAR 31 2005

(PCT Rule 44.1)

STAT 15 DB-LS
Date of mailing
(day/month/year)

31/03/2005

Applicant's or agent's file reference
6287P013PCT to 03551. P073PCT

FOR FURTHER ACTION See paragraphs 1 and 4 below

International application No.
PCT/US2004/035048

International filing date
(day/month/year) 21/10/2004

Applicant

ZORAN CORPORATION

1. ☒ The applicant is hereby notified that the international search report and the written opinion of the International Searching Authority have been established and are transmitted herewith.

Filing of amendments and statement under Article 19:

The applicant is entitled, if he so wishes, to amend the claims of the International Application (see Rule 46):

When? The time limit for filing such amendments is normally 2 months from the date of transmittal of the International Search Report; however, for more details, see the notes on the accompanying sheet.

Where? Directly to the International Bureau of WIPO, 34 chemin des Colombettes
1211 Geneva 20, Switzerland, Facsimile No.: (41-22) 740.14.35

For more detailed instructions, see the notes on the accompanying sheet.

2. ☐ The applicant is hereby notified that no international search report will be established and that the declaration under Article 17(2)(a) to that effect and the written opinion of the International Searching Authority are transmitted herewith.
3. ☐ **With regard to the protest** against payment of (an) additional fee(s) under Rule 40.2, the applicant is notified that:

- ☐ the protest together with the decision thereon has been transmitted to the International Bureau together with the applicant's request to forward the texts of both the protest and the decision thereon to the designated Offices.
- ☐ no decision has been made yet on the protest; the applicant will be notified as soon as a decision is made.

4. Reminders

Shortly after the expiration of **18 months** from the priority date, the international application will be published by the International Bureau. If the applicant wishes to avoid or postpone publication, a notice of withdrawal of the international application, or of the priority claim, must reach the International Bureau as provided in Rules 90bis.1 and 90bis.3, respectively, before the completion of the technical preparations for international publication.

The applicant may submit comments on an informal basis on the written opinion of the International Searching Authority to the International Bureau. The International Bureau will send a copy of such comments to all designated Offices unless an international preliminary examination report has been or is to be established. These comments would also be made available to the public but not before the expiration of 30 months from the priority date.

Within **19 months** from the priority date, but only in respect of some designated Offices, a demand for international preliminary examination must be filed if the applicant wishes to postpone the entry into the national phase until **30 months** from the priority date (in some Offices even later); otherwise, the applicant must, **within 20 months** from the priority date, perform the prescribed acts for entry into the national phase before those designated Offices.

In respect of other designated Offices, the time limit of **30 months** (or later) will apply even if no demand is filed within 19 months.

See the Annex to Form PCT/IB/301 and, for details about the applicable time limits, Office by Office, see the *PCT Applicant's Guide*, Volume II, National Chapters and the WIPO Internet site.

Name and mailing address of the International Searching Authority

 European Patent Office, P.B. 5818 Patentlaan 2
NL-2280 HV Rijswijk
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Authorized officer

Shantisaroop Pherai

NOTES TO FORM PCT/ISA/220

These Notes are intended to give the basic instructions concerning the filing of amendments under article 19. The Notes are based on the requirements of the Patent Cooperation Treaty, the Regulations and the Administrative Instructions under that Treaty. In case of discrepancy between these Notes and those requirements, the latter are applicable. For more detailed information, see also the PCT Applicant's Guide, a publication of WIPO.

In these Notes, "Article", "Rule", and "Section" refer to the provisions of the PCT, the PCT Regulations and the PCT Administrative Instructions respectively.

INSTRUCTIONS CONCERNING AMENDMENTS UNDER ARTICLE 19

The applicant has, after having received the international search report, one opportunity to amend the claims of the international application. It should however be emphasized that, since all parts of the international application (claims, description and drawings) may be amended during the international preliminary examination procedure, there is usually no need to file amendments of the claims under Article 19 except where, e.g. the applicant wants the latter to be published for the purposes of provisional protection or has another reason for amending the claims before international publication. Furthermore, it should be emphasized that provisional protection is available in some States only.

What parts of the International application may be amended?

Under Article 19, only the claims may be amended.

During the international phase, the claims may also be amended (or further amended) under Article 34 before the International Preliminary Examining Authority. The description and drawings may only be amended under Article 34 before the International Examining Authority.

Upon entry into the national phase, all parts of the international application may be amended under Article 28 or, where applicable, Article 41.

When?

Within 2 months from the date of transmittal of the international search report or 16 months from the priority date, whichever time limit expires later. It should be noted, however, that the amendments will be considered as having been received on time if they are received by the International Bureau after the expiration of the applicable time limit but before the completion of the technical preparations for international publication (Rule 46.1).

Where not to file the amendments?

The amendments may only be filed with the International Bureau and not with the receiving Office or the International Searching Authority (Rule 46.2).

Where a demand for international preliminary examination has been/is filed, see below.

How?

Either by cancelling one or more entire claims, by adding one or more new claims or by amending the text of one or more of the claims as filed.

A replacement sheet must be submitted for each sheet of the claims which, on account of an amendment or amendments, differs from the sheet originally filed.

All the claims appearing on a replacement sheet must be numbered in Arabic numerals. Where a claim is cancelled, no renumbering of the other claims is required. In all cases where claims are renumbered, they must be renumbered consecutively (Administrative Instructions, Section 205(b)).

The amendments must be made in the language in which the international application is to be published.

What documents must/may accompany the amendments?

Letter (Section 205(b)):

The amendments must be submitted with a letter.

The letter will not be published with the international application and the amended claims. It should not be confused with the "Statement under Article 19(1)" (see below, under "Statement under Article 19(1)").

The letter must be in English or French, at the choice of the applicant. However, if the language of the international application is English, the letter must be in English; if the language of the international application is French, the letter must be in French.

Best Available Copy

NOTES TO FORM PCT/ISA/220 (continued)

The letter must indicate the differences between the claims as filed and the claims as amended. It must, in particular, indicate, in connection with each claim appearing in the international application (it being understood that identical indications concerning several claims may be grouped), whether

- (i) the claim is unchanged;
- (ii) the claim is cancelled;
- (iii) the claim is new;
- (iv) the claim replaces one or more claims as filed;
- (v) the claim is the result of the division of a claim as filed.

The following examples illustrate the manner in which amendments must be explained in the accompanying letter:

1. [Where originally there were 48 claims and after amendment of some claims there are 51]:
"Claims 1 to 29, 31, 32, 34, 35, 37 to 48 replaced by amended claims bearing the same numbers; claims 30, 33 and 36 unchanged; new claims 49 to 51 added."
2. [Where originally there were 15 claims and after amendment of all claims there are 11]:
"Claims 1 to 15 replaced by amended claims 1 to 11."
3. [Where originally there were 14 claims and the amendments consist in cancelling some claims and in adding new claims]:
"Claims 1 to 6 and 14 unchanged; claims 7 to 13 cancelled; new claims 15, 16 and 17 added." or
"Claims 7 to 13 cancelled; new claims 15, 16 and 17 added; all other claims unchanged."
4. [Where various kinds of amendments are made]:
"Claims 1-10 unchanged; claims 11 to 13, 18 and 19 cancelled; claims 14, 15 and 16 replaced by amended claim 14; claim 17 subdivided into amended claims 15, 16 and 17; new claims 20 and 21 added."

"Statement under article 19(1)" (Rule 46.4)

The amendments may be accompanied by a statement explaining the amendments and indicating any impact that such amendments might have on the description and the drawings (which cannot be amended under Article 19(1)).

The statement will be published with the international application and the amended claims.

It must be in the language in which the international application is to be published.

It must be brief, not exceeding 500 words if in English or if translated into English.

It should not be confused with and does not replace the letter indicating the differences between the claims as filed and as amended. It must be filed on a separate sheet and must be identified as such by a heading, preferably by using the words "Statement under Article 19(1)."

It may not contain any disparaging comments on the international search report or the relevance of citations contained in that report. Reference to citations, relevant to a given claim, contained in the international search report may be made only in connection with an amendment of that claim.

Consequence if a demand for international preliminary examination has already been filed

If, at the time of filing any amendments under Article 19, a demand for international preliminary examination has already been submitted, the applicant must preferably, at the same time of filing the amendments with the International Bureau, also file a copy of such amendments with the International Preliminary Examining Authority (see Rule 62.2(a), first sentence).

Consequence with regard to translation of the international application for entry into the national phase

The applicant's attention is drawn to the fact that, where upon entry into the national phase, a translation of the claims as amended under Article 19 may have to be furnished to the designated/elected Offices, instead of, or in addition to, the translation of the claims as filed.

For further details on the requirements of each designated/elected Office, see Volume II of the PCT Applicant's Guide.

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PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference 6287P013PCT	FOR FURTHER ACTION <small>see Form PCT/ISA/220 as well as, where applicable, item 5 below.</small>	
International application No. PCT/US2004/035048	International filing date (day/month/year) 21/10/2004	(Earliest) Priority Date (day/month/year) 23/10/2003
Applicant ZORAN CORPORATION		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 4 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ The international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

b. ☐ With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, see Box No. I.

2. ☐ **Certain claims were found unsearchable** (See Box II).

3. ☐ **Unity of invention is lacking** (see Box III).

4. With regard to the **title**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established by this Authority to read as follows:

5. With regard to the **abstract**,

☐ the text is approved as submitted by the applicant.

☒ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. With regard to the **drawings**,

a. the figure of the **drawings** to be published with the abstract is Figure No. 5

☐ as suggested by the applicant.

☐ as selected by this Authority, because the applicant failed to suggest a figure.

☒ as selected by this Authority, because this figure better characterizes the invention.

b. ☐ none of the figures is to be published with the abstract.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US2004/035048

Box No. IV Text of the abstract (Continuation of item 5 of the first sheet)

Processing video by receiving input video data and associated control signals; determining, in response to the control signals, whether to process the input video data or to bypass the input video data so as to provide output video data; processing the input video data, or bypassing the input video data, in response to the determination; and allowing a next cascaded entity to receive the output video data and the control signals. A cascade of at least two video processing entities, each including: an input interface(190) for receiving input video data and associated control signals; logic for receiving at least one control signal and in response to select a selected path out of at least one processing path(195) and at least one bypass path(194); wherein the selected path outputs output video data; and an output interface(198) for allowing a next cascaded entity to receive at least the output video data.

INTERNATIONAL SEARCH REPORT

International Application No

PCT/US2004/035048

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 H04N5/14

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 H04N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 296 935 A (BRESLER ET AL) 22 March 1994 (1994-03-22) column 1, line 15 - column 3, line 35 column 36, line 35 - line 44 column 41, line 60 - column 42, line 15 column 62, line 62 - line 68 column 67, line 58 - column 69, line 64 column 73, line 12 - line 24 column 81, line 31 - column 83, line 2 column 86, line 26 - column 89, line 35	1-4, 7-29, 32-48
Y	US 4 914 574 A (TERADA ET AL) 3 April 1990 (1990-04-03) the whole document	1,2,5,7, 8,13,14, 17,18, 22,25, 30,47,48

☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

* Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

T later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

X document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

Y document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

G document member of the same patent family

Date of the actual completion of the international search

17 March 2005

Date of mailing of the international search report

31/03/2005

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Yvonnet, J

INTERNATIONAL SEARCH REPORT

International Application No

PCT/US2004/035048

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	EP 0 713 291 A (MATSUSHITA ELECTRIC INDUSTRIAL CO., LTD) 22 May 1996 (1996-05-22) abstract	1,2,5,7, 8,13,14, 17,18, 22,25, 30,47,48
A	----- US 6 377 628 B1 (SCHULTZ MARK ALAN ET AL) 23 April 2002 (2002-04-23) column 6, lines 1-5 column 12, line 52 - column 13, line 44; figure 1	1-48
A	----- US 5 737 032 A (STENZEL ET AL) 7 April 1998 (1998-04-07) the whole document	21,23,46
A	----- US 6 020 931 A (BILBREY ET AL) 1 February 2000 (2000-02-01) figures 12-14 -----	21,46

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US2004/035048

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 5296935	A	22-03-1994	IL 93274 A	08-07-1993
			IL 93493 A	18-02-1997
			IL 96816 A	15-03-1995
			IL 96829 A	05-12-1996
			IL 96957 A	18-03-1997
			AT 156642 T	15-08-1997
			AT 151583 T	15-04-1997
			CA 2035658 A1	06-08-1991
			CA 2035666 A1	06-08-1991
			DE 69125519 D1	15-05-1997
			DE 69127151 D1	11-09-1997
			DE 69127151 T2	19-03-1998
			EP 0475554 A2	18-03-1992
			EP 0449407 A2	02-10-1991
			JP 7064525 A	10-03-1995
			US 5615282 A	25-03-1997
			US 6181439 B1	30-01-2001
			US 2003123090 A1	03-07-2003
			US 2003090725 A1	15-05-2003
			US 2003123091 A1	03-07-2003
			US 2004036918 A1	26-02-2004
			US 2005030561 A1	10-02-2005
			US 5875288 A	23-02-1999
			US 5339176 A	16-08-1994
			US 2004079253 A1	29-04-2004
			US 2002012130 A1	31-01-2002
			JP 5153380 A	18-06-1993
			AT 197362 T	15-11-2000
			CA 2059193 A1	16-07-1992
			DE 69231540 D1	07-12-2000
			DE 69231540 T2	21-06-2001
			DK 495563 T3	27-11-2000
			EP 0495563 A2	22-07-1992
			ES 2152223 T3	01-02-2001
			JP 4316848 A	09-11-1992
US 4914574	A	03-04-1990	JP 61049263 A	11-03-1986
			JP 1797902 C	12-11-1993
			JP 4081223 B	22-12-1992
			JP 61123968 A	11-06-1986
			US 4833605 A	23-05-1989
EP 0713291	A	22-05-1996	CN 1153946 A ,C	09-07-1997
			DE 69527253 D1	08-08-2002
			DE 69527253 T2	24-10-2002
			EP 0713291 A2	22-05-1996
			JP 2922451 B2	26-07-1999
			JP 8235157 A	13-09-1996
			KR 202151 B1	15-06-1999
			US 5886912 A	23-03-1999
US 6377628	B1	23-04-2002	WO 9827742 A1	25-06-1998
			AU 4507097 A	15-07-1998
			AU 4601697 A	15-07-1998
			AU 5381098 A	15-07-1998
			AU 5381198 A	15-07-1998
			AU 5523598 A	15-07-1998
			AU 5527598 A	15-07-1998

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US2004/035048

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 6377628	B1	AU 5698098 A	15-07-1998
		AU 5698598 A	15-07-1998
		AU 5797498 A	15-07-1998
		AU 5897398 A	15-07-1998
		BR 9713712 A	08-02-2000
		BR 9713747 A	21-03-2000
		BR 9714678 A	03-10-2000
		BR 9714679 A	03-10-2000
		CN 1246244 A ,C	01-03-2000
		CN 1246245 A	01-03-2000
		CN 1247003 A	08-03-2000
		CN 1246233 A	01-03-2000
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		CN 1246250 A	01-03-2000
		CN 1247669 A ,C	15-03-2000
		DE 69716465 D1	21-11-2002
		DE 69716465 T2	20-02-2003
		DE 69716467 D1	21-11-2002
		DE 69716467 T2	20-02-2003
		DE 69719070 D1	20-03-2003
		DE 69719070 T2	31-07-2003
		DE 69719365 D1	03-04-2003
		DE 69719365 T2	16-10-2003
		DE 69719797 D1	17-04-2003
		DE 69719797 T2	14-08-2003
		DE 69720513 D1	08-05-2003
		DE 69720513 T2	13-11-2003
		DE 69721299 D1	28-05-2003
		DE 69721299 T2	06-11-2003
		DE 69721819 D1	12-06-2003
		DE 69721819 T2	20-11-2003
		EP 0945001 A1	29-09-1999
		EP 0945022 A1	29-09-1999
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		EP 0947103 A1	06-10-1999
		EP 0945025 A1	29-09-1999
		EP 0947104 A1	06-10-1999
		EP 0945027 A1	29-09-1999
		EP 0945028 A1	29-09-1999
		EP 0945029 A1	29-09-1999
US 5737032	A	07-04-1998	NONE
US 6020931	A	01-02-2000	NONE

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

PCT

To:

see form PCT/ISA/220

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY
(PCT Rule 43*bis*.1)

Date of mailing
(day/month/year) see form PCT/ISA/210 (second sheet)

Applicant's or agent's file reference
see form PCT/ISA/220

FOR FURTHER ACTION
See paragraph 2 below

International application No.
PCT/US2004/035048

International filing date (day/month/year)
21.10.2004

Priority date (day/month/year)
23.10.2003

International Patent Classification (IPC) or both national classification and IPC
H04N5/14

Applicant
ZORAN CORPORATION

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1*bis*(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA:



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**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/US2004/035048

Box No. I Basis of the opinion

1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
 - ☐ This opinion has been established on the basis of a translation from the original language into the following language , which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
 - a. type of material:
 - ☐ a sequence listing
 - ☐ table(s) related to the sequence listing
 - b. format of material:
 - ☐ in written format
 - ☐ in computer readable form
 - c. time of filing/furnishing:
 - ☐ contained in the international application as filed.
 - ☐ filed together with the international application in computer readable form.
 - ☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/US2004/035048

Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	5,30
	No: Claims	1-4,6-29,31-48
Inventive step (IS)	Yes: Claims	
	No: Claims	1-48
Industrial applicability (IA)	Yes: Claims	1-48
	No: Claims	

2. Citations and explanations

see separate sheet